

REMARKS/ARGUMENTS

Applicant thanks the Examiner for the careful examination given to the present application. The application has been reviewed in light of the Office action, and it is respectfully submitted that the application as amended is patentable over the art of record.

Claims 8 and 10 have been amended. New claims 13-17 have been added.

Claims 8-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dingwall et al. (WO 93/23767) in view of Vercellotti et al. (U.S. Patent No. 5,266,925). For the following reasons, the examiner's rejection is respectfully traversed.

None of the references teach or suggest a "label identification step of identifying the said labels by successively reading the code of each of the said labels whilst temporarily inhibiting the other labels which are not yet identified" as recited in claim 8. The Office action refers to Vercellotti in col. 3, lines 6-15, as teaching that the interrogator isolates the tag to receive only a single response (Office action dated 6/23/2003, page 2). The Office action then states that the fact that an isolated label is identified among a group of unidentified labels by isolation of the label, means that the label is effectively inhibiting other labels from responding.

The Applicant respectfully submits that Vercellotti in col. 3, lines 6-15, does not teach temporarily inhibiting other labels. Vercellotti in col. 3, lines 12-15, states, "If more than one response is received by the portal, the interrogation system will employ a series of address field bisection steps in order to isolate a single response." In Vercellotti, during the bisection process all unidentified tags are always active and are not temporarily inhibited or prevented from responding to an interrogation signal.

Vercellotti discloses a process in which a tag always emits its entire code for all the interrogations. When several tags are present and answer together, Vercellotti teaches that the interrogation system bisects an interval of the code values to limit the following interrogation to

a half of the interval, and then the interrogation signal is retransmitted. If a tag identification number is greater than the requested address, the tag replies. However, if the interrogator receives no replies after a bisection, when previously receiving several replies, the interrogator must widen the interrogated range. The bisection process is continued until the Vercellotti interrogation system receives only a single tag reply. Once the identification of one of the tags is made, the interrogator transmits a suppression signal to the identified tag, and then the interrogations are resumed with the same process for the remaining unidentified tags.

Since the Vercellotti interrogator only inhibits an identified tag, all the unidentified tags stay active and are not temporarily inhibited during the bisection process. Thus, Vercellotti does not teach or suggest an identification step of identifying the labels by successively reading the code of each of the said labels while temporarily inhibiting the other labels which are not yet identified as in the claimed invention. Therefore, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

✓ With respect to claim 9, none of the references disclose or suggest "a label identification confirmation step, which precedes and influences the information passage step, comprising the sending of a signal containing at least part of the code of the label which has just been identified" as recited in claim 9. The Office action refers to Vercellotti in col. 5, lines 3-5, as teaching a label identification confirmation step that includes the transmission of a confirmation message (Office action dated 6/23/2003, page 5).

The Applicant respectfully submits that Vercellotti in col. 5, lines 3-5, does not teach a confirmation step that transmits a signal containing a part of the code of the label which has just been identified. Vercellotti in col. 4, line 66, to col. 5, line 7, discloses how the system obtains only one tag reply when multiple tags respond in the same time slot, and the worst case time that it would take for the interrogation. Thus, the tag has not yet been identified, but is still in the

process of being identified by the Vercellotti interrogator. Since the tag is in the process of being identified, the acknowledgment from the Vercellotti interrogator in col. 5, lines 3-5, is a signal in a process that is still identifying a tag, rather than a signal containing a part of the code of the tag which has just been identified. Therefore, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

With respect to claim 10, none of the references disclose or suggest that "the label identification step is undertaking alternatively in one code reading direction from most significant data and then another code reading direction from least significant data for each of the labels" as recited in claim 10. Dingwall is cited by the Office action as disclosing these elements. In the present invention, the label identification step is undertaken alternatively in one reading direction and then in another reading direction in order not to favorize the identification of the labels having extreme code values. Dingwall does not disclose or suggest the alternative reading of the code in one reading direction in one direction and then in another direction. There is also nothing in Dingwall that suggests it could be of interest to require the reading of the codes alternatively in one direction and then in the opposite direction. Thus, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

Claims 11-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dingwall in view of Kurokawa et al. (U.S. Patent 5,864,706). For the following reasons, the examiner's rejection is respectfully traversed.

With respect to claim 11, none of the reference disclose or suggest that "the interrogation apparatus comprising a signal catalogue, wherein the signal catalogue comprises a first signal for demanding the sending of the label codes by fragments in a first reading direction from most significant data, a prior signal for demanding the sending of the entire label code by at least one of the labels" as recited in claim 11. Dingwall discloses various signals, but none of these signal

is a prior signal that demands the label to send its entire label code. Therefore, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

With respect to claim 12, none of the references disclose or suggest that "the signal catalogue comprises a second signal for demanding the sending of the label codes in fragments, in a second reading direction which is the reverse of the first reading direction" as recited in claim 12. Dingwall teaches an interrogation apparatus which requires label codes to always be in the same reading direction. Dingwall does not disclose a second signal demanding the sending of label codes in a second reading direction, and nothing in Dingwall suggests that it could be of interest to require the reading of the codes alternatively in one direction and then in the opposite direction. Kurokawa discloses an apparatus in which data may be read from the least significant bit or from the most significant bit. However, Kurokawa does not disclose a second signal demanding the sending of label codes in a second reading direction, and nothing in Kurokawa suggest that it could be of interest to require the reading of the code alternatively in one direction and then in the opposite direction. Thus, even if combined, the references do not disclose or suggest all the elements of the claimed invention.

Furthermore, there is no suggestion or motivation for one skilled in the art at the time the invention was made to combine Dingwall with Kurokawa to arrive at the claimed invention. The mere fact that the references can be combined does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. The teaching or suggestion to make the modification must be found in the prior art, and not based on an applicant's disclosure.

Dingwall discloses a system that identifies coded articles by a search sequence. In Dingwall, the interrogator inhibits each article after it is identified, so that one-by-one each of the remaining articles are also identified. There is no suggestion or motivation in Dingwall to have a signal that demands the article to send its entire code or for requiring the codes to be read in a

Appl. No. 09/319,626
Amdt. Dated December 23, 2003
Reply to Office action of June 23, 2003

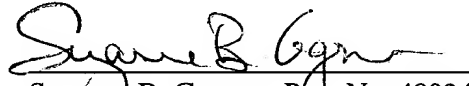
particular direction. Therefore, there is no motivation to look at the operating process in Kurokawa. Reconsideration and withdrawal of the rejection based upon the combination of references is respectfully requested.

In light of the foregoing, it is submitted that the present application is in a condition for allowance and notice to that effect is hereby requested. If it is determined that the application is not in a condition for allowance, the examiner is invited to initiate a telephone interview with the undersigned attorney to expedite prosecution of the application.

If there are any additional fees resulting from this communication, please charge the same to our Deposit Account No. 16-0820, our Order No. 31767.

Respectfully submitted,
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Date: December 23, 2003